

AT32 Bootloader connection issue

Question:

AT32 Bootloader supports USART1, USART2, and USB_DFU. These peripherals share the same pin with bootloader. If a wireless module on USART2 is detected to be receiving/sending data, Bootloader will not be able to connect to USART1.

Answer:

AT32 Bootloader, after getting started, will start polling USART1, USART2 and USB_DFU. After detecting a communication signal on one of these peripherals, the Bootloader will then enter this peripheral, and stop taking care of other peripherals.

The reason is that USART2 has a wireless module this is communicating, and the module shares the same pin with Bootloader and USART2. In this case, Bootloader would enter USART2 so that USART1 cannot be connected.

Therefore it is recommended to keep the RX pin of the unused peripheral (USARTX_RX, USB_DFU) fixed (either high or low) during Bootloader connection. If these pins are floating or transmitting data during Bootloader startup, the Bootloader is likely to enter these unused peripherals so that it cannot be connected to the desired peripheral.

Type: MCU application

Applicable products: AT32 Family

Main function: Bootloader

Other function: None

Document revision history

Date	Revision	Changes
2022.3.4	2.0.0	Initial release

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